



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

lu

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,877	04/12/2004	Takayuki Yamada	1509.1061	1815
21171	7590	10/01/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			TA, THO DAC	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/821,877	Applicant(s) YAMADA, TAKAYUKI	
	Examiner Tho D. Ta	Art Unit 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/12/04</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input checked="" type="checkbox"/> Other: <u>Sheet 3 of 7 of US 5,249,971</u> |
|---|--|

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai et al. (5,249,971).

In regard to claim 1, Lai et al. discloses a socket for an electrical part 8 comprising: a socket body 6 having one surface 62 to which an electrical part 8 is to be mounted and another surface (bottom wall 60), opposing to the one surface 62, to which a printed circuit board 5 is to be mounted; and a contact pin 7 provided for the socket body 6 for achieving electrical connection between the electrical part 8 and the printed circuit board 5, the contact pin 7 comprising: a springy portion formed with a plurality of curved portions (see fig. 3); an electrical part side contact portion 74 formed to a front end side of the springy portion so as to be contacted to a terminal 81 of the electrical part 8 so as to establish an electrical connection therebetween; a printed circuit board side contact portion 72 formed to one of the curved portions of the springy portion so as to be contacted to the printed circuit board 5 so as to establish an electrical connection therebetween; and an electric path formed between the electrical part side contact portion 74 and the printed circuit board side contact portion 72.

Art Unit: 2833

In regard to claim 2, Lai et al. discloses that the printed circuit board side contact portion 72 is formed to one curved portion nearest to the front end of the springy portion (see attached drawing).

In regard to claim 3, Lai et al. discloses that springy portion is formed with first curved portion 74' positioned nearest to the front end thereof and a second curved portion 73' (see attached drawing) apart therefrom, the second curved portion 73' having a radius of curvature smaller than that of the first curved portion 74'.

In regard to claim 4, Lai et al. discloses that the springy portion is formed with first curved portion 74' positioned nearest to the front end thereof and a second curved portion 73" (see attached drawing) apart therefrom, the second curved portion 73" having a radius of curvature larger than that of the first curved portion 74'.

In regard to claim 5, Lai et al. discloses that portions of the springy portion between which the second curved portion 73" is formed are formed to be parallel to each other .

3. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Fedorjaka (6,302,727).

In regard to claim 10, Fedorjaka discloses the contact pin 40 for a socket 10 for an electrical part 70 to be mounted to a socket body 12 of the socket 10, comprising: a

Art Unit: 2833

base portion 60 mounted to the socket body 12; and a springy portion extending from the base portion 60, the springy portion including a plurality of curved portions including a curved portion formed to a front end portion of the springy portion as an electrical part side contact portion 42 and another curved portion formed on the side of the base portion 60 as a printed circuit board side contact portion 40b.

Allowable Subject Matter

4. Claims 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: In regard to claim 6, the prior art fails to provide, teach or suggest the electric path of the springy portion formed between the printed circuit board side contact portion and the electrical part side contact portion has substantially a linear structure. In regard to claim 7, the prior art fails to provide, teach or suggest an intervening portion is disposed between the printed circuit board side contact portion of the contact pin and the printed circuit board so as to electrically connect the printed circuit board side contact portion of the contact pin and the printed circuit board.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

Art Unit: 2833

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



THO D. TA
PRIMARY EXAMINER

tdt
09/28/04